# Subpart N—Denaturing Operations and Manufacture of Articles

#### §19.451 General.

Authorized proprietors who are qualified as processors may conduct denaturing operations or manufacture articles pursuant to the provisions of this part. Proprietors shall not conduct denaturing operations or manufacture articles except as provided in this part. Records of denaturing operations and the manufacture of articles shall be maintained in accordance with §19.752 and §19.753.

(Sec. 201, Pub. L. 85-859, 72 Stat. 1353, as amended (26 U.S.C. 5178); sec. 807(a), Pub. L. 96-39, 93 Stat. 286 (26 U.S.C. 5241))

#### DENATURATION

#### §19.452 Formulas.

Spirits shall be denatured in accordance with formulas as authorized in 27 CFR part 21 or their alternatives. Denaturing materials shall be thoroughly mixed with the spirits being denatured.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242); sec. 807, Pub. L. 96–39, 93 Stat. 286 (26 U.S.C. 5241))

# § 19.453 Testing of denaturants.

- (a) *Testing*. Proprietors shall ensure that the materials they receive for use in denaturing conform to the specifications prescribed in 27 CFR part 21. The appropriate TTB officer may require the testing of denaturants at any time.
- (b) Samples. Samples of denaturants shall be taken in such manner as to represent a true composite of the total lot being sampled. When samples are tested by persons other than a proprietor, a copy of the analysis or a statement, signed by the chemist performing the test, shall be secured and filed by the proprietor for each test. Samples of denaturants may be taken by appropriate TTB officers at any time for testing by Government chemists.
- (c) Conformity. When a denaturant does not conform to the specifications prescribed under 27 CFR part 21, the proprietor shall not use the material unless he treats or manipulates the denaturant to make it conform to such

specifications. Such treated or manipulated denaturant shall again be tested.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242))

#### §19.454 Gauge for denaturation.

The proprietor shall gauge spirits before denaturation and after denaturation and record each gauge on the record of denaturation as prescribed in §19.752(b). However, spirits dumped from previously gauged containers or spirits transferred directly to mixing tanks from gauge tanks where they were gauged, need not again be gauged. Measurements of spirits and denaturants shall be made by volume, weight, by approved meter, or, when approved by the appropriate TTB officer, other devices or methods.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1358, as amended (26 U.S.C. 5204); sec. 807, Pub. L. 96–39, 93 Stat. 286 (26 U.S.C. 5241))

### §19.455 Dissolving of denaturants.

Denaturants which are difficult to dissolve in spirits at usual working temperatures, which are highly volatile, or which become solid at such usual temperatures may be liquefied or dissolved in a small quantity of spirits or water in advance of their use in the production of specially denatured spirits, pursuant to the prescribed formula, so long as the proof of the denatured spirits manufactured does not fall below the proof prescribed for the applicable formula in 27 CFR part 21. Any spirits used in dissolving denaturants and contained in the resulting solution shall be included as part of the total quantity of spirits denatured in each batch.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242))

## § 19.456 Adding denaturants.

Denaturants and spirits shall be mixed in packages, tanks, or bulk conveyances on bonded premises. The appropriate TTB officer may, on written application, authorize other methods of mixing denaturants and spirits if he deems such denaturation will not hinder effective administration of this part or jeopardize the revenue. If requested by the appropriate TTB officer,

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the proprietor shall submit a flow diagram of the intended process or method of adding denaturants.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242))

# § 19.457 Neutralizing denatured spirits.

Proprietors may add trace quantities of compounds such as caustics or acids to certain formulas of denatured spirits to neutralize such spirits, if the intended effect of the denaturants is not reduced. Proprietors who neutralize denatured spirits must record, for each formula the kinds and quantities of compounds used, and the formula number of the denatured spirits neutralized.

(Sec. 201, Pub. L. 85-859, 72 Stat. 1369, as amended (26 U.S.C. 5242); sec. 807, Pub. L. 96-39, 93 Stat. 286 (26 U.S.C. 5241))

#### § 19.458 Restoration and redenaturation of recovered denatured spirits and recovered articles.

Recovered denatured spirits and recovered articles received on bonded premises, as provided in subpart U of this part, for restoration (including redistillation, if necessary) and/or redenaturation may not be withdrawn from bonded premises except for industrial use or after denaturation thereof. If the recovered or restored denatured spirits or recovered articles are to be redenatured and do not require the full amount of denaturants for redenaturation, a notation to that effect will be made on the record of denaturation required by \$19.752(b).

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242))

### § 19.459 Mixing of denatured spirits.

- (a) Denatured spirits produced under the same formula may be mixed on bonded premises.
- (b) Denatured spirits of different formulas may be mixed on bonded premises for immediate redistillation at the same plant or at another plant in accordance with the provisions of subpart K of this part.

(Sec. 201, Pub. L. 85–859, 72 Stat. 1369, as amended (26 U.S.C. 5242); sec. 807, Pub. L. 96–39, 93 Stat. 286 (26 U.S.C. 5241))

# § 19.460 Conversion of denatured alcohol formulas.

- (a) Conversion of Formula No. 1. Any specially denatured alcohol, except Formulas No. 3-A and No. 30, may be converted into specially denatured alcohol, Formula No. 1, by the addition of methyl alcohol and either denatonium benzoate, N.F., methyl isobutyl ketone, mixed isomers of nitropropane, or methyl *n*-butyl ketone in accordance with the formulation prescribed in §21.32 of this chapter. For specially denatured alcohol Formulas No. 3-A and No. 30, the methyl alcohol content shall be reduced to the level prescribed for specially denatured alcohol Formula No. 1 by the addition of ethyl alcohol before adding one of the other ingredients prescribed in §21.32 of this chapter.
- (b) Conversion to Formula No. 29. Any specially denatured alcohol may be converted to specially denatured alcohol, Formula No. 29, by the addition of acetaldehyde or ethyl acetate, in accordance with the formulations prescribed in 27 CFR 21.56.
- (c) General rule. In addition to the conversions provided in paragraphs (a) and (b) of this section, any specially denatured alcohol may be converted to another specially denatured alcohol formula, if the resultant alcohol-denaturant mixture contains only the alcohol and denaturant or denaturants in the proportions authorized in 27 CFR part 21 for the formula to which converted. Specially denatured alcohol which is converted under this paragraph may only be used as authorized in 27 CFR part 21 for the formula to which converted.
- (d) Conditions governing conversion and use. The quantities of denaturants required for conversions authorized in paragraphs (a), (b) and (c) of this section shall be determined on the basis of the alcohol in the formulations. Specially denatured alcohol converted to Formula No. 29 may be used as authorized in 27 CFR 21.56(b) except that it shall not be used in the manufacture of vinegar, drugs, or medicinal chemicals, and the conditions governing use provided in 27 CFR 21.56(c) shall apply.
- (e) Conversion to other formulations. Proprietors desiring to convert specially denatured alcohol other than as